CLAIMS

What is claimed is:

1   1.   A method, comprising:

2   defining a set of commands to be used with a command line interface

3   (CLI), each command in the set of commands specifying an action to

4   be performed in a system;

5   defining a set of system interfaces including objects and methods, wherein

6   each action specified in the command is associated with an object and

7   a method, the object and the method performing semantics required

8   by the command; and

9   creating a CLI description file for each command in the set of commands,

10   the CLI description file mapping the command with the action and

11   the associated objects and the methods.

1   2.   The method of claim 1, wherein defining the set of commands comprises

2   defining keywords, arguments, input and output requirements for each

3   command.

1   3.   The method of claim 2, wherein defining the keywords and the arguments

2   for each command comprises defining help texts for the keywords and for

3   the arguments.

1　4.　The method of claim 2, wherein defining the input requirements comprises

2　　　defining an argument set for the command, and wherein defining the

3　　　output requirements comprises defining a display format to display a

4　　　result responsive to executing the command.

1　5.　The method of claim 4, wherein the argument set is associated with the

2　　　action of the command, and wherein the argument set is included in an

3　　　input string specified with the command, the argument set comprising zero

4　　　or more arguments.

1　6.　The method of claim 5, wherein an argument type is selected for each

2　　　argument, and wherein each argument type is implemented as a Java class.

1　7.　The method of claim 1, wherein defining a set of interfaces including

2　　　objects and methods comprises defining a Java class for the action, the Java

3　　　class for the action naming the object associated with the action and having

4　　　methods that can be invoked when performing the action.

1　8.　The method of claim 7, further comprising registering the object with the

2　　　system such that when the action is performed, the methods are invoked.

1　9.　The method of claim 1, wherein the CLI description file is created using a

2　　　generalized markup language.

1　10.　The method of claim 9, wherein the generalized markup language is

2　　　Extensible Markup Language (XML).

1 11. The method of claim 10, further comprising:

2 compiling the CLI description file to generate a run time module.

1 12. A computer readable medium having stored thereon sequences of

2 instructions which are executable by a digital processing system, and

3 which, when executed by the digital processing system, cause the system to

4 perform a method comprising:

5 defining a set of commands to be used with a command line interface

6 (CLI), each command in the set of commands specifying an action to

7 be performed in a system;

8 defining a set of interfaces including objects and methods, wherein each

9 action specified in the command is associated with an object and a

10 method, the object and the method performing semantics required by

11 the command; and

12 creating a CLI description file for each command in the set of commands,

13 the CLI description file mapping the command with the action and

14 the associated objects and the methods.

1 13. The computer readable medium of claim 12, wherein defining the set of

2 commands comprises defining keywords, arguments, and input and

3 output requirements for each command.

1 14. The computer readable medium of claim 13, wherein defining the

2 keywords and the arguments for each command comprises defining help

3 texts for the keywords and for the arguments.

1   15.   The computer readable medium of claim 13, wherein defining the input

2   requirements comprises defining an argument set for the command, and

3   wherein defining the output requirements comprises defining a display

4   format to display a result responsive to executing the command.

1   16.   The computer readable medium of claim 15, wherein the argument set is

2   associated with the action of the command, and wherein the argument set

3   is included in an input string specified with the command, the argument

4   set comprising zero or more arguments.

1   17.   The computer readable medium of claim 16, wherein an argument type is

2   selected for each argument, and wherein each argument type is

3   implemented as a Java class.

1   18.   The computer readable medium of claim 12, wherein defining a set of

2   interfaces including objects and methods comprises defining a Java class

3   for the action, the Java class for the action naming the object associated

4   with the action and having methods that can be invoked when performing

5   the action.

1   19.   The computer readable medium of claim 18, further comprising registering

2   the object with the system such that when the action is performed, the

3   methods are invoked.

1   20.   The computer readable medium of claim 12, wherein the CLI description

2   file is created using a generalized markup language.

1   21. The computer readable medium of claim 20, wherein the generalized

2   markup language is Extensible Markup Language (XML).

1   22. The computer readable medium of claim 12, further comprising:

2   compiling the CLI description file to generate a run time module.

1   23. A method, comprising:

2   defining a set of commands to be used with a command line interface

3   (CLI);

4   defining keywords, arguments, input and output requirements for each

5   command, each command in the set of commands specifying an action

6   to be performed in a system;

7   defining a set of interfaces including objects and methods, wherein each

8   action specified by the command is associated with an object and a

9   method, the object and the method performing semantics required by

10   the command;

11   creating a CLI description file for each command in the set of commands,

12   the CLI description file mapping the command with the action and

13   the associated objects and the methods, wherein the CLI description

14   file is created using Extensible Markup Language (XML); and

15   compiling the CLI description file to create a run time module.

1   24. The method of claim 23, wherein defining the keywords and the arguments

2   for each command comprises defining help texts for the keywords and for

3   the arguments.

1   25.   The method of claim 23, wherein defining the input requirements

2   comprises defining an argument set for the command, and wherein

3   defining the output requirements comprises defining a display format to

4   display a result responsive to executing the command.

1   26.   The method of claim 25, wherein the argument set is associated with the

2   action of the command, and wherein the argument set is included in an

3   input string specified with the command, the argument set comprising zero

4   or more arguments.

1   27.   The method of claim 26, wherein an argument type is selected for each

2   argument, and wherein each argument type is implemented as a Java class.

1   28.   The method of claim 23, wherein defining a set of interfaces including

2   objects and methods comprises defining a Java class for the action, the Java

3   class for the action naming the object associated with the action and having

4   methods that can be invoked when performing the action.

1   29.   The method of claim 28, further comprising registering the object with the

2   system such that when the action is performed, the corresponding methods

3   are invoked.